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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,428	07/21/2003	Nicolas Moneuse	Q76507	4983

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WASHINGTON, DC 20037

EXAMINER

BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,428

Applicant(s)

MONEUSE, NICOLAS

Examiner

Sherman D. Basinger

Art Unit

3617

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-13 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 3 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The substitute specification and the replacement sheets of drawings filed October 13, 2004 have been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

New grounds of rejection necessitated by new claims 14-20

3. Claims 14-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for "a torodial-shaped **magnetic means** rigidly fixed to said rudder" and for "the motor is controlled to adjust a slip frequency of the torodial-shaped **magnetic means** to apply a torque to hold said rudder in position".
4. The specification as originally filed was searched for support for the above limitations, especially for a description of a torodial shaped **magnetic means**. No support for the above limitations was found in the specification as originally filed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/37308 in view of Lehle.

In WO 308 the rudder is 41, 42; the motor stator is 53; the motor rotor is 52; and the pod is 42.

WO 308 does not disclose that his motor is an asynchronous motor which is powered by a power converter controlled so as to hold the rudder in position.

Lehle discloses an asynchronous motor (column 2, lines 11-13) powered by a power converter (column 1, lines 20-21).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to replace the motor of WO 308 with a asynchronous motor powered by a power converter similar to the motor and power converter of Lehle for the reason given in column 1, lines 20-21 of Lehle.

New grounds of rejection necessitated by the amendments to claim 1

While neither Lehle nor WO 308 disclose controlling a power supply to the motor to adjust a slip frequency of the rotor to hold the rudder in position, this would have been obvious at the time the invention was made to a person having ordinary skill in the art to

which said subject matter pertains. Again WO 308 discloses that the propeller device can be locked electromagnetically as opposed to using a mechanical brake. This teaches using the power supply to the electric motor to hold it in place. One having ordinary skill in the art with respect to asynchronous motors realizes that the slippage in an asynchronous motor is the difference of the rotating field speed and the actual rotor speed relative to the rotating field speed-see Lehle et al column 1, lines 59-63. One having ordinary skill in the art with respect to asynchronous motors would have known that the slip frequency of the rotor can be adjusted to stop rotor speed such as to hold the rotor in place. Motivation to do so would be to avoid the use of a mechanical brake when using an asynchronous motor in the turnable propeller drive of WO 308.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/37308 and Lehle as applied to claim 2 above, and further in view of Eaves et al. WO 00/37308 does not disclose his motor as having a stator with a plurality of windings each of which is powered by an independent power converter. This concept is taught by Eaves et al. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains in view of the teachings of Eaves et al to provide the motor of WO 00/37308 with a stator of multiple windings each of which is powered by an independent power converter. Motivation to do so is amply provided in column 2, lines 21-27 of Eaves et al.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/37308 and Lehle as combined for claim 1 and further in view of Pleuger et al.

WO 308 does not include an underwater portion in the form of a rudder blade. Note that motor casing 72 of Pleuger et al has underwater portions 76 and 77 in the form of rudder blades. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide pod 42 of WO 308 with rudder blades similar to 76 and 77 of Pleuger et al. Motivation to do so can be found in Pleuger et al, column 3, lines 44 and 45.

Allowable Subject Matter

9. Claims 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 8-13 are allowed because claim 8 is for the most part claim 3 rewritten into independent form.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 2, 4, 5 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 703-308-1139. The examiner can normally be reached on M-F (6:00-2:30 ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Sherman D. Basinger
Primary Examiner
Art Unit 3617

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